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UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/758,509	01/11/2001	Derek Lidow	P/3748-4	8398
2352	7590 12/04/2002			
001110	NK FABER GERB &	EXAMINER		
1180 AVENI NEW YORK	JE OF THE AMERIC. , NY 100368403	AS	MEINECKE DIAZ, SUSANNA M	
			ART UNIT	PAPER NUMBER
			3623	1/2
			DATE MAILED: 12/04/2002	16

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/758,509	LIDOW, DEREK				
Office Action Summary	Examiner	Art Unit				
•	Susanna M. Diaz	3623				
The MAILING DATE of this communication app		1 1 1 1 1				
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status						
1) Responsive to communication(s) filed on <u>05 A</u>	uaust 2002					
	s action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. <b>Disposition of Claims</b>						
4) Claim(s) 1-132 is/are pending in the application.						
4a) Of the above claim(s) 29-69 and 98-132 is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-28 and 70-97</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>01 October 2001</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
<ul> <li>Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
14)⊠ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
a) ☐ The translation of the foreign language provisional application has been received.  15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7.	5) Notice of Informal F	r (PTO-413) Paper No(s) Patent Application (PTO-152)				

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#### **DETAILED ACTION**

1. This Non-Final Office action is responsive to Applicant's Election filed on July 29, 2002.

Applicant has elected Group I (claims 1-28 and 70-97) without traverse.

Claims 29-69 and 98-132 stand as non-elected claims and are therefore withdrawn from consideration.

Claims 1-28 and 70-97 are presented for examination.

## Claim Objections

2. Claims 75 and 89 are objected to because of the following informalities:

Claim 75, line 2, delete "a", insert --an--

Claim 89, lines 2-3, delete "or abort code from the customer sends the abort code", insert --an abort code from the customer--

Appropriate correction is required.

# Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 1-28 and 70-97 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claims 1 and 8 seem to interchange the phrases "customer demands" and "forecasted demands." It is not clear whether the two phrases refer to the same or distinct demands. For examination purposes, all occurrences of "customer demands" will be interpreted as "forecasted demands." Claim 70 mirrors claim 1 and it also seems to interchange the phrases "customer demands" and "forecasted demands."

Claim 1 recites the step of "analyzing the forecasted demands to determine whether the forecasted demands are valid" (lines 3-4); however, it is unclear what is meant by determining whether or not forecasted demands are "valid." For example, does "valid" mean "feasible" as in the forecasted demands can feasibly be filled by the supply chain network or does "valid" mean "accurate" as in the supply chain network determines that the information used by the customer to assess forecasted demands is analyzed correctly. For examination purposes, "valid" will be interpreted as "feasible" as in the forecasted demands can feasibly be filled by the supply chain network. Claim 70 mirrors claim 1; therefore, the same rejection applies.

Claims 1, 2, 5-8, 12, 19-24, and 26 interchange the phrases "at least one customer" with "the customer" as well as "at least one supplier" with "the supplier."

Please be consistent throughout the claims. In other words, please use the phrase "the at least one customer" when making reference to the first occurrence of "at least one customer" (found in line 2 of claim 1) and please use the phrase "the at least one supplier" when making reference to the first occurrence of "at least one supplier" (found in line 5 of claim 1). Claims 70, 71, 74-77, 81, 88-93, and 95 mirror claims 1, 2, 5-8, 12, 19-24, and 26, respectively; therefore, the same rejection applies.

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Claim 26 recites that "the receiving is performed by a supply chain server in a supply chain network"; however, it is not clear whether "the receiving" refers to the receiving of forecasted demands (recited in line 2 of claim 1) or the receiving of a return request (recited in lines 2-3 of claim 26). For examination purposes, the latter of the two will be assumed.

Claims 3, 4, 9-11, 13-18, 25, 27, and 28 are dependent from claims already rejected above and therefore inherit the rejections under 35 U.S.C. 112, 2<sup>nd</sup> paragraph, of the respective claims.

Claims 72, 73, 78-80, 82-87, 94, 96, and 97 are dependent from claims already rejected above and therefore inherit the rejections under 35 U.S.C. 112, 2<sup>nd</sup> paragraph, of the respective claims.

Appropriate correction and/or clarification is required.

### Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-28 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as

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opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim, the recited process must somehow apply, involve, use, or advance the technological arts. Further, mere intended or nominal use of a component, albeit within the technological arts, does not confer statutory subject matter to an otherwise abstract idea if the component does not apply, involve, use, or advance the underlying process. In the present case, claims 1-28 fail to apply, involve, use, or advance the technological arts. As a matter of fact, lines 4-6 of page 8 of the specification state that the invention may be implemented manually. Notably, claim 8 recites that "the customer demands are received by a supply chain server." Claim 14 recites that "the forecasted demands are received in one of an email, a spreadsheet, and an XML format" and claim 26 recites that "receiving is performed by a supply chain server in a supply chain network." Nonetheless, these recitations of technology merely equate to nominal recitations that fail to apply, involve, use, or advance the technological arts. For example, these nominal recitations of technology fail to expressly clarify that the underlying process of the invention requires the use of technology; therefore, claims 1-28 are deemed to be non-statutory.

Appropriate correction is required.

### Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in-

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(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

8. Claims 1, 5-7, 15, 21, 70, 74-76, 84, and 90 are rejected under 35 U.S.C. 102(e) as being anticipated by Bellini et al. (U.S. Patent No. 5,974,395).

Bellini discloses a system for processing customer demands, the system comprising:

[Claim 70] a supply chain server coupled to at least one customer and at least one supplier, the supply chain server including a messaging services system and an ERP system (col. 3, lines 53-65; col. 5, lines 60-67; col. 6, lines 41-51; col. 7, lines 18-38); wherein:

the messaging services system receives forecasted demands from the at least one customer (col. 3, lines 53-65; col. 7, lines 39-50; col. 10, lines 29-54);

the ERP system analyzes the forecasted demands received by the messaging services system to determine whether the forecasted demands are valid (col. 7, line 58 through col. 8, line 62 – The supply chain planning engine, which is part of the overall ERP system, accesses information about all enterprises in the supply chain to determine if a "promise" can be made to fulfill the order request, i.e., feasibility of fulfilling the forecasted demands is evaluated); and

the messaging system sends the forecasted demands to the at least one supplier when the forecasted demands are valid (col. 7, line 58 through col. 8, line 62);

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[Claim 74] further comprising a contractual agreement requiring the supplier to follow a production protocol in light of the forecasted demands sent by the messaging services system (col. 6, lines 41-51; col. 7, lines 39-50; col. 8, lines 7-61 – A "promise" is interpreted as a type of contractual agreement and it can refer to a promise to supply products, i.e., as part of a production protocol, or parts, i.e., as part of an inventory protocol);

[Claim 75] further comprising a contractual agreement requiring the supplier to follow an inventory protocol in light of the forecasted demands sent by the messaging services system (col. 6, lines 41-51; col. 7, lines 39-50; col. 8, lines 7-61 – A "promise" is interpreted as a type of contractual agreement and it can refer to a promise to supply products, i.e., as part of a production protocol, or parts, i.e., as part of an inventory protocol);

[Claim 76] wherein the messaging services system sends an exception notice to the customer when the ERP system determines that the demands are not valid (col. 8, lines 35-40 – A promise is withdrawn if it is determined that the supply chain network cannot fulfill the requested order);

[Claim 84] wherein the forecasted demands relate to products (col. 7, lines 39-50; col. 9, lines 1-8);

[Claim 90] wherein the supply chain server is further connected to at least one logistics provider (col. 7, lines 1-9, 58-64); and

the ERP system further sends a command to the logistics provider so that the logistics provider transfers products corresponding to the forecasted demands from the

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supplier to the customer in response to orders from the supply chain server (col. 7, lines 1-9, 58-64).

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[Claims 1, 5-7, 15, 21] Claims 1, 5-7, 15, and 21 recite a method with limitations corresponding to those recited in claims 70, 74-76, 84, and 90; therefore, the same rejection applies.

## Claim Rejections - 35 USC § 103

- 9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 10. Claims 12-14, 16-18, 22-28, 81-83, 85-87, and 91-97 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bellini et al. (U.S. Patent No. 5,974,395), as applied to claims 1, 21, 70, and 90 above.

[Claims 81-83] Bellini's invention provides a data specification format which allows various enterprises to communicate with one another bi-directionally. An electronic planning interchange data protocol facilitates the transfer of data among "enterprises running disparate transactional execution systems" (col. 2, line 7 through col. 3, line 28), thereby implying that Bellini can handle data submitted in multiple formats. However, Bellini does not explicitly disclose who determines the format and in what format the forecasted demands are submitted nor if the messaging services system converts the

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forecasted demands into a different format. Since one of the benefits of Bellini's invention is to be able to handle data submitted in multiple formats, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to allow forecasted demands to be in a format determined by the customer (claim 81), e.g., upon submission of forecasted demands by the customer, in order to provide to the customers the convenience of using their preferred internal supply chain system to submit forecasted demands to Bellini's centralized supply chain planning engine. Further, since Bellini's invention converts data to an electronic planning interchange data format, this implies that Bellini's messaging services system does indeed convert the forecasted demands into a different format if the customer does not submit the forecasted demands in the electronic planning interchange data format (as per claim 82). Additionally, regarding claim 83, it should be noted that EDI stands for electronic data interchange. The purpose of EDI is to allow different enterprises with different internal communications protocols and different internal data formats to be able to communicate with one another using a common format, called EDI. Therefore, EDI is functionally equivalent to Bellini's EPI (electronic planning interchange) data protocol as described in col. 3, lines 15-21 of Bellini. Consequently, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to adapt Bellini's invention to receive forecasted demands in an EDI format in order to make Bellini's invention compatible with a format similar in function to Bellini's EPI, thereby making Bellini more marketable to a wider

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range of enterprises especially since EDI is a commonly used data format for communications among various enterprises.

[Claims 85-87] Bellini explicitly teaches the forecasting of demands related to products, yet he fails to disclose the forecasting of demands related to services, bandwidth in a network, and airline tickets. However, Official Notice is taken that it is old and well-known in the art of demand management to forecast demands for services, bandwidth in a network, and airline tickets. As with any product, it is essential to forecast demands for services, bandwidth in a network, and airline tickets in order to allow a supplier of such commodities to effectively plan to meet customer demands for each commodity. Therefore, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to adapt Bellini to be able to handle forecasted demands related to services (claim 85), bandwidth in a network (claim 86), and airline tickets (claim 87) in order to allow a supplier of such commodities to effectively plan to meet customer demands for each commodity, thereby making Bellini's invention more marketable across a wide range of enterprises.

[Claims 91-92] Bellini does not explicitly teach the use of an extranet manager to provide tracking information relating to products via a web site accessible by the customers and suppliers; however, Official Notice is taken that such an extranet manager to provide tracking information relating to products via a web site accessible by the customers and suppliers is old and well-known in the art of supply chain

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management. Extranets have made the supply chain more fluid by allowing both customers and suppliers to have access to pertinent information from one another's internal system. Also, placing this inter-enterprise information on a web site has made such information more easily and globally accessible to the multiple enterprises involved in the supply chain process. Therefore, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to adapt Bellini's supply chain server to include an extranet manager that provides tracking information relating to the products (claim 91) by producing a web site accessible by at least one of the customer and the supplier (claim 92) in order to make the supply chain more fluid by allowing both customers and suppliers to have access to pertinent information from one another's internal system. Also, placing this inter-enterprise information on a web site makes such information more easily and globally accessible to the multiple enterprises involved in the supply chain process.

[Claims 93-94] As per claim 93, Bellini teaches the use of tracking information that includes information regarding the status of the product through potential bottlenecks between the supplier and the customer (col. 6, lines 41-51; col. 9, lines 39-45).

However, Bellini does not teach that said bottlenecks include customs as per claim 94.

Official Notice is taken that it is old and well-known in the art of supply chain management that bottlenecks due to passing items through customs (e.g., when the ordered items are being delivered from another country) are often taken into account when assessing an accurate shipment delivery date. Therefore, it would have been

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obvious to one of ordinary skill in the art at the time of Applicant's invention to adapt Bellini to take bottlenecks such as those caused by items passing through customs (claim 94) into account when assessing a shipment delivery date in order to facilitate determination of as accurate as a shipment delivery date as possible when items are being delivered from another country.

As discussed above, Bellini teaches a supply chain server coupled [Claims 95-97] to a logistics provider, a messaging services system, and an ERP system; however, Bellini does not explicitly discuss the details of processing return requests for a particular product to a corresponding supplier. Official Notice is taken that it is old and well-known in the art of supply chain management to enable the processing of return requests for a particular product to a corresponding supplier. Furthermore, Official Notice is taken that it is also old and well-known in the art to provide customers with a desired replacement product, which is either available from suppliers in the system or for which forecasted demands need to be adjusted when the replacement product is not available from the suppliers in the system. These return and replacement policies encourage good relations between suppliers and their customers, especially when suppliers tout a 100% satisfaction guaranteed policy. Therefore, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to adapt Bellini to enable the processing of return requests for a particular product to a corresponding supplier as well as providing customers with a desired replacement product, which is either available from suppliers in the system or

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for which forecasted demands need to be adjusted when the replacement product is not available from the suppliers in the system (as per claims 95-97), in order to encourage good relations between suppliers and their customers, especially when suppliers tout a 100% satisfaction guaranteed policy.

[Claims 12-14, 16-18, 22-28] Claims 12-14, 16-18, and 22-28 recite a method with limitations corresponding to those recited in claims 81-83, 85-87, and 91-97; therefore, the same rejection applies.

11. Claims 2-4, 8-11, 19-20, 71-73, 77-80, and 88-89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bellini et al. (U.S. Patent No. 5,974,395), as applied to claims 1 and 70 above, in view of Landvater (World Class Production and Inventory Management).

[Claims 71-73, 77-80] As discussed above, Bellini's supply chain planning engine receives forecasted demands, yet Bellini provides no explicit explanation regarding further analysis of these forecasted demands. However, Landvater teaches the importance of optimizing demand management in order to stabilize the overall operations of a supply chain, thereby promoting more smoothly and effectively run operations (page 71). Landvater extrapolates forecasted demands based on expected demand by the customer (see at least page 74), historical data of the forecasted demands (see at least page 75), and information supplied by the customer (see at least page 74). Taking all of these factors into account leads to a more accurate forecast of

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demands; therefore, the Examiner asserts that it would have been obvious to one ordinary skill in the art at the time of Applicant's invention to incorporate with Bellini the extra step of extrapolating forecasted demands based on expected demand by the customer (claim 71), historical data of the forecasted demands (claim 72), and/or information supplied by the customer (claim 73), all taught by Landvater, in order to stabilize the overall operations of a supply chain, thereby promoting more smoothly and effectively run operations (as also taught by Landvater).

Further, Landvater promotes obtaining as complete and accurate information as possible when analyzing forecasted demands (see at least pages 70-71, 75) in order to optimize the demand management assessments; therefore, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to implement with the modified Bellini a check to determine that all information is complete and accurate as part of the analysis of the forecasted demands (claim 77) in order to optimize the demand management assessments.

Additionally, as per claim 79, while Bellini teaches use of the messaging services system for sending suppliers valid demands (as discussed in the art rejection above), Bellini does not expressly discuss accumulated demands (as per claims 78-80). However, Landvater teaches the accumulation of forecasted demands that relate to demands for a plurality of time periods from a plurality of customers (see at least pages 70, 75-78, 79-80, 85). Again, this contributes to Landvater's teaching of the importance of optimizing demand management in order to stabilize the overall operations of a supply chain, thereby promoting more smoothly and effectively run operations (page

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71). Therefore, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to adapt the modified Bellini to collect information regarding the accumulation of forecasted demands that relate to demands for a plurality of time periods from a plurality of customers (claims 78-80) to optimize demand management in order to stabilize the overall operations of a supply chain, thereby promoting more smoothly and effectively run operations.

[Claims 88-89] While Bellini does not explicitly teach the cancellation of customer orders related to forecasted demands, Landvater discusses this as a common problem in the industry (see at least page 70). Neither Bellini nor Landvater specifically discloses use of an abort code/command to cancel a customer order; however, Official Notice is taken that the use of abort codes and commands to cancel orders are old and well-known in the art. These abort codes and commands often provide a shortcut to identify the details of an order, thereby making it easier and more efficient to quickly cancel a previously placed order. Therefore, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to incorporate with the modified Bellini an abort code and command that a customer can use to cancel an order corresponding to one of the forecasted demands through Bellini's messaging and ERP systems (as per claims 88 and 89) in order to provide a shortcut to identify the details of an order, thereby making it easier and more efficient to quickly cancel a previously placed order.

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[Claims 2-4, 8-11, 19-20] Claims 2-4, 8-11, and 19-20 recite a method with limitations corresponding to those recited in claims 71-73, 77-80, and 88-89; therefore, the same rejection applies.

#### **Conclusion**

12. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

Vollman et al. (<u>Manufacturing Planning and Control Systems</u>) – Discusses demand management in a manufacturing environment.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susanna M. Diaz whose telephone number is (703) 305-1337. The examiner can normally be reached on Monday-Friday, 9 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (703) 305-9643.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Receptionist whose telephone number is (703)308-1113.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington D.C. 20231

or faxed to:

(703)305-7687 [Official communications; including

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After Final communications labeled

"Box AF"]

(703)746-7048

Susanna Diay

[Informal/Draft communications, labeled

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"PROPOSED" or "DRAFT"]

Hand delivered responses should be brought to Crystal Park 5, 2451 Crystal Drive, Arlington, VA, 22202, 7<sup>th</sup> floor receptionist.

Susanna M. Diaz Patent Examiner

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December 2, 2002